

CLAIMS

We claim:

1. A communication method comprising:

registering a plurality of users for receiving messages;

determining, in response to receiving a first message from at least one alert originator, one or more user terminals to receive a second message corresponding to the received first message, each of the one or more user terminals being associated with at least one registered user;

converting the first message to one or more gateway messages; and

transferring each of the one or more gateway messages to one or more corresponding communication gateways for distribution of the second message by the one or more communication gateways to each of the registered users associated with at least one message group, wherein the transfer is performed using a non-voice channel.

2. The communication method of claim 1, in which the registering further comprises:

categorizing each registered user according to one of an administrator, a manager, and a non-originating user;

collecting information from each user in response to questions defined by an administrator associated with the message group; and

storing the collected user information in a database.

3. The communication method of claim 2, in which the determining further comprises:

analyzing the collected user information for the presence of one or more particular informational items based on criteria selected by the at least one alert originator; and

selecting the group of user terminals based on the users associated with the user terminals whose user information matches the criteria specified in the analyzing.

4. The communication method of claim 1, in which the converting further comprises:

reformatting, for each of the one or more gateway messages, the first message received from the alert originator to a format in which the communication gateway associated with the gateway message will accept and perform operations in response to the incoming gateway message; and

forming an address for each of the one or more gateway messages to include the domain name information associated with the communication gateway and the user identification information associated with the registered user receiving the second message.

5. The communication method of claim 4, wherein at least one of the communication gateways requires a different format for the received gateway message than the format for gateway messages for every other communication gateway.

6. The communication method of claim 4, in which at least one communication gateway is associated with wireless service provider.

7. The communication method of claim 4, in which the transferring further comprises prioritizing the order in which each gateway message is transferred according to communication gateway characteristics.

8. The communication method of claim 7, in which the gateway characteristics include at least one of a common domain name and a particular communications medium.

9. The communication method of claim 1, in which the elapsed time from the first message being initiated by the alert originator to the time that at least one intended user terminal receives a corresponding second message is within two seconds.

10. The communication method of claim 1, in which the non-voice channel is a data channel.

11. The communication method of claim 1, in which the non-voice channel is a control channel.

12. The communication method of claim 1, further comprising tracking replies received from the registered users via the communication gateway confirming at least user terminal receipt of the second message.

13. A communication system comprising:

a first messaging subsystem which may be coupled to an alert originator and to one or more communication gateways, wherein each of the gateways is also coupled to at least one user terminal, and wherein the first messaging subsystem associates a unique set of message parameters with each of the communication gateways;

wherein the first messaging subsystem is configured to transmit at least one gateway message to a plurality of the user terminals via the one or more communication gateways, in accordance with each set of the unique message parameters for each communication gateway, upon receiving a first message from the alert originator.

14. The communication system of claim 13, wherein the first messaging subsystem includes at least one message engine.

15. The communication system of claim 14, wherein the messaging subsystem includes at least one web server and a database coupled to the at least one messaging engine.

16. The communication system of claim 13, wherein the messaging subsystem further includes user information collecting means for obtaining a plurality of informational items for each user, wherein the user information collecting means is configured to collect each of a set of informational items defined by an administrator.

17. The communication system of claim 13, wherein each of the user terminals is associated with at least one message group and in which each of the user terminals associated with each message group is further associated with one of an administrator, a manager, and a non-originating user for the message group.

18. The communication system of claim 13, in which the elapsed time from the first message being initiated by the alert originator to the time that at least one intended user terminal receives a corresponding second message is within two seconds.

19. The communication system of claim 13, further comprising at least a second messaging subsystem coupled to the first messaging subsystem, wherein the first and second messaging subsystems are configured to provide message transfers between the user terminals of a first message group and the user terminals of a second message group.

20. A communication method comprising:
determining, using a message engine, a set of destination devices for a message to be transferred to at least one destination group based on at least one of: a delivery class associated with users having a priority level associated with the at least one destination group, dynamic properties of the at least one destination group, and users that match a set of search criteria specified by a sender;
for destination devices having limited message length output capabilities, dropping any file attachments from the message using a mail processor,;

calculating the number of pieces in which the message needs to be transferred based on a preferred number of characters associated with a delivery method;

generating the message content for each piece;

transferring an individual electronic mail message for each piece based on the number of destination devices targeted; and

minimizing the number of outgoing connections to the mail processor by bundling together devices with the same electronic mail domain.